

Amended Claims

1. [Currently Amended] A stapling device comprised of an articulation section, a staple cartridge containing one or more arrays of staples and parts of a staple-firing mechanism, said cartridge having a facing surface comprising an area having slots through which the staples of said arrays are fired and two bores associated with each said arrays, and an anvil portion comprising two locking screws and a facing surface through which said locking screws can be extended, wherein said cartridge is located at either the proximal or the distal end of said articulation section and said anvil portion is located at the other end of said articulation section; characterized in that:
- (a) the facing surfaces of said anvil and said cartridge are curved surfaces having matching curvatures such that, when said articulation section is bent bringing said curved facing surfaces of said anvil and said cartridge close to each other, said curved surfaces slide over one another, thereby helping to correct transverse misalignment; and
 - (b) the center of curvature of said facing surface of said cartridge in said area having said slots is lowered relative to the center of curvature of the rest of said facing surface, resulting in a surface having two levels, wherein the an upper level comprises two sections that are located at the proximal and distal ends of said cartridge and the a lower level is located in

the center of said cartridge above said array of staples; said lower level has a length a little longer than the width of the face of said anvil; said two sections of said upper level are connected to said lower level by means of two sloping walls; characterized in that as said articulation section is bent bringing said curved facing surfaces of said anvil and said cartridge close to each other said curved facing surface of said anvil slides down said sloping walls until said curved facing surface of said anvil is positioned over said lower level in said curved facing surface of said cartridge, thereby assisting in correcting longitudinal-misalignment and bringing said locking screws in said anvil directly opposite said bores in said cartridge,

thereby allowing the parts of said stapling device to be brought into the correct working relationship.

2. [Original] A stapling device according to claim 1, wherein the cartridge is located at the proximal end of the articulation section and the anvil is located at the distal end of said articulation section.

3-5 cancelled

6. [Previously presented] A stapling device according to claim 1, further comprising a recess and step structure in the curved face of the staple cartridge, wherein said step structure is a reflector of ultrasound radiation that comprises one element of an ultrasound positioning assembly used to verify that the parts of said stapling device are in the correct working relationship.
7. [Previously presented] A stapling device according to claim 1, wherein the articulation section is a two-way articulation section and the surface of the anvil is a section of a right circular cylinder cut by a plane parallel to its axis.
8. Cancelled
9. [Original] A method of bringing the anvil and cartridge of the stapling device of claim 1 into correct working relationship, said method comprising over-bending the articulation section.
10. [Original] A stapling device according to claim 1 and further comprising a plunger, wherein the parts of the staple-firing mechanism comprise cams and staple pushers; wherein pulling on said plunger causes said cams to move longitudinally in the cartridge, said longitudinal movement causing said staple pushers to rise towards the curved front surface of said cartridge and the

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staples to exit said cartridge in a direction at right angles to the direction of motion of said cams.